



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

C2

Job Sheet 200411



Part No: C2

Job Qty: 2 pcs

Part Name: C-Series Remote Hook 2,000 lbs Lift Capacity



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 9/11/19

Job Tracking No: RD SD Dart Tennovation

Due Date: 10/5/19

Created By: Linda Lacelle

Type: R+D

Description:

Note: DWG C2 Rev. 2 IPP Rev. A 18.04.24 new issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	External Load - 1	2 pcs	10/5/19	10/5/19	0.00	2.00	External Load - 1		AP 2019/09/17
							External Load - 2		
							External Load - 3		
100	External Load - 2 - B4B	2 pcs	10/5/19	10/5/19	0.00	2.00	External Load - 1 - B4B		
							External Load - 2 - B4B		
							External Load - 3 - B4B		
110	QC 5	2 pcs	10/5/19	10/5/19	0.00	0.00	QC 5 - 10		
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
							QC 5 - 30		
130	Packaging 3-1 - Stock - B4B	2 pcs	10/5/19	10/5/19	0.00	0.00	Packaging 3 - 1 - B4B		DAS 30 9-89 SEP 30 2019
							Packaging 3 - 2 - B4B		
							Packaging 3 - 3 - B4B		
							Packaging 3 - 4 - B4B		
							Packaging 3 - 5 - B4B		
	Packaging 3 - 6 - B4B								



Dart Aerospace Ltd.
1270 Aberdeen Street
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CANADA
TEL.: 1 613 632-5200
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Container No: S218186



Part: C2

Job No: 200411

Serial No/Batch: S218186

Revision: 2

Inspector:

Exp Date:

Instructions:

Date: 09/30/19

AC12004

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
MS21044N4	Nut, Self-Locking	3 Ea (3 ea)	90-External Load - 1	5196530
AN4-16A	Bolt	2 Ea (2 ea)	100-External Load - 2 - B4B	5196064-2
C2-12-7P	Teflon Spacer Lock	2 pcs (2 ea)	100-External Load - 2 - B4B	5029336
C2-12-8	DUST SHEILD - C2 HOOK	2 pcs (2 ea)	100-External Load - 2 - B4B	5113748
C2-13-6P	Keeperless Adapter C2-K Hook	1 pcs (1 ea)	100-External Load - 2 - B4B	5029240
C2-3-2-1	Roller Pin Retaining Ring	1 Ea (1 ea)	100-External Load - 2 - B4B	5168898
C2-7-1P	Load Beam Bumper	1 pcs (1 ea)	100-External Load - 2 - B4B	5029255
C2-7-2	Lock Bumper	2 pcs (2 ea)	100-External Load - 2 - B4B	5119259
C3-3-4	Link Pin	1 pcs (1 ea)	100-External Load - 2 - B4B	5118503
C3-3-4-1	Ring, Retaining	4 pcs (4 ea)	100-External Load - 2 - B4B	5137712
C3-3-9	Actuator Spring	1 pcs (1 ea)	100-External Load - 2 - B4B	5128955
C3-8-3-1	Spacer	1 pcs (1 ea)	100-External Load - 2 - B4B	5104175
C3-8-4	Solenoid Cover Gasket	1 pcs (1 ea)	100-External Load - 2 - B4B	5213024
MS21083N3	Nut	3 Ea (3 ea)	100-External Load - 2 - B4B	5142051
MS35266-63	Solenoid Cover Screw	1 Ea (1 ea)	100-External Load - 2 - B4B	5131202 5183280
NAS1149F0332P	Washer (AN960-10L)	2 Ea (2 ea)	100-External Load - 2 - B4B	5103666-1
NAS1149F0363P	Washer (AN960-10)	1 Ea (1 ea)	100-External Load - 2 - B4B	5075330-3
NAS1149F0463P	Washer (AN960-416)	6 Ea (6 ea)	100-External Load - 2 - B4B	5097088-1
C2-4-4A	LOAD BEAM	1		5184524

				Packaging 3 - 7 - B4B	DAS	SEP 30 2019
				Packaging 3 - 8 - B4B	30	
				Packaging 3 - 9 - B4B	9-89	
				Packaging 3 - 10 - B4B		
				Packaging 3 - 11 - B4B		
				Packaging 3 - 12 - B4B		
				Packaging 3 - 13 - B4B		
				Packaging 3 - 14 - B4B		
				Packaging 3 - 15 - B4B		
				Packaging 3 - 16 - B4B		
				Packaging 3 - 17 - B4B		
				Packaging 3 - 18 - B4B		
				Packaging 3 - 19 - B4B		
				Packaging 3 - 20 - B4B		
				Packaging 3 - 21 - B4B		
				Packaging 3 - 22 - B4B		
				Packaging 3 - 23 - B4B		
				Packaging 3 - 24 - B4B		
				Packaging 3 - 25 - B4B		
				Packaging 3 - 26 - B4B		
				Packaging 3 - 27 - B4B		
				Packaging 3 - 28 - B4B		
				Packaging 3 - 29 - B4B		
				Packaging 3 - 30 - B4B		
				Packaging 3 - 31 - B4B		
				Packaging 3 - 32 - B4B		
				Packaging 3 - 33 - B4B		
				Packaging 3 - 34 - B4B		
				Packaging 3 - 35 - B4B		
				Packaging 3 - 36 - B4B		
135 DC - 1 - B4B	2 pcs	10/5/19	0.00 0.00	DC - 1 - B4B	DAS	SEP 30 2019
				DC - 2 - B4B	21	
140 QC 21 - SA	2 pcs	10/5/19	0.00 0.00	QC 21 - SA - 21	9-89	
				QC 21 - SA - 70		
				QC 21 - SA - 53	DAS	SEP 30 2019
Part Op 100 - 1- PICK C2-2-1 AND LASER ENGRAVE AS PER DWG . SEE NOTE 3 AND 4 ON SHEET 3.2 ASSEMBLE AS Descriptions: PER DWG 110 - (QC5- Inspect part completeness to step on W/O) 130 - Identify as per dwg & Stock Location: <i>GA 169</i> 135 - (Document Control) - Photocopy blue file OM & OOPM-C2 Rev 4 140 - (QC21- Final Inspection - Work Order Release)						
Job BOM						
Part / Item	Component Name	Quantity	Operation	Container		
188-FPSS-1032-1/4	Set Screw	4 Ea (2 ea)	90-External Load - 1			
NAS1149F0363P	Washer (AN960-10)	2 Ea (1 ea)	100-External Load - 2 - B4B			
<i>C3-8-3-1</i>	<i>SEL SPACER</i>	<i>1</i>		<i>5104175</i>		
Job Allocations						
Operation	Component Part	Required	Inventory	Allocated		
90-External Load - 1	188-FPSS-1032-1/4	4	103	0		
100-External Load - 2 - B4B	NAS1149F0363P	2	352	0		
Part Specifications						
Specifications could not be found.						

MS2104404

Plex 9/11/19 9:58 AM dart.lacelle.linda

Linda Lacelle

From: Michael Lee
Sent: Wednesday, September 11, 2019 9:02 AM
To: Linda Lacelle
Cc: Alejandro Flores
Subject: RE: W/O request

Can you please use C2 as the part number.

Thanks,

Mike

From: Linda Lacelle <llacelle@dartaero.com>
Sent: Wednesday, September 11, 2019 7:31 AM
To: Michael Lee <mlee1@dartaero.com>
Cc: Alejandro Flores <aflores@dartaero.com>
Subject: RE: W/O request

I can, but require a P/N to issue a w/o

From: Michael Lee <mlee1@dartaero.com>
Sent: Tuesday, September 10, 2019 3:41 PM
To: Linda Lacelle <llacelle@dartaero.com>
Cc: Alejandro Flores <aflores@dartaero.com>
Subject: W/O request

Hey Linda,

We need to take 2 scrap cargo hooks (that belong to engineering) and assemble them into one working unit. This may require a few components from inventory including a cage.

Is it possible to have a blank W/O generated for Alain to do this work and to issue parts against.

All cost will be charged to RD SD Dart Tennovation.

Thanks,

Mike

C2 Bill of Materials

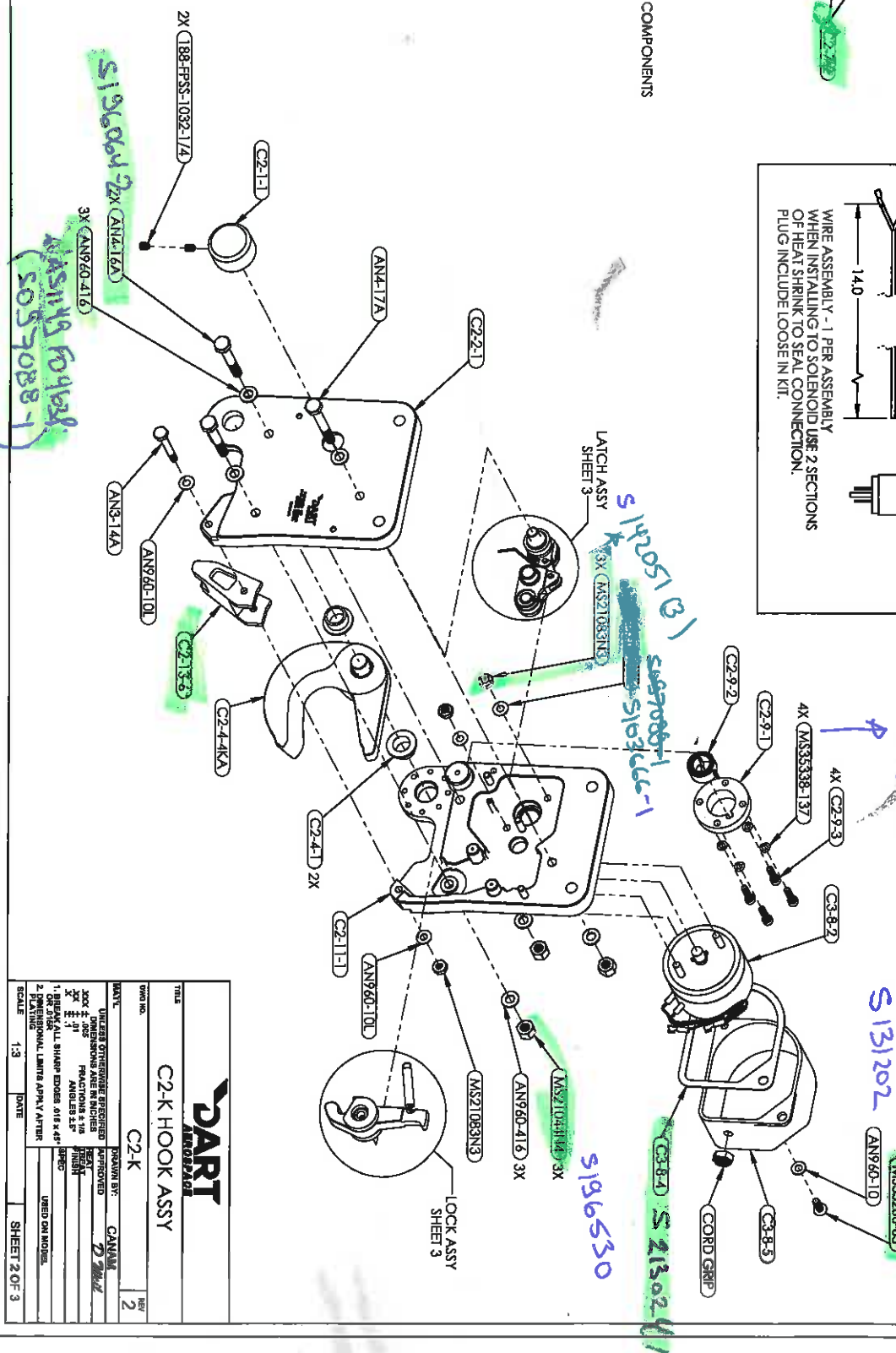
Part No	Description	Operation	Quantity	Component Part/Item	Component Name	Sub Components	Mfr Parts
C2	C-Series Remote Hook 2,000 lbs Lift Capacity	90-External Load - 1	2 Ea/pc	188-FPSS-1032-1/4	Set Screw	0	
	C-Series Remote Hook 2,000 lbs Lift Capacity	100-External Load - 2 - B4B	1 pcs/pc	2595K22	Heat Shrink Tube	0	
			2 Ea/pc	32446	Crimp Terminal	0	
			1 Ea/pc	8183K6	Wire Guide/Grip	0	
			1 Ea/pc	AN3-14A	Bolt	0	
			2 Ea/pc	AN4-16A	Bolt	0	
			1 Ea/pc	AN4-17A	Bolt	0	
			1 pcs/pc	C2-1-1	Manual Release Knob	1	
			1 pcs/pc	C2-10-1	Lock Spring Pin	0	
			1 pcs/pc	C2-11-1	Side Plate, Solenoid	1	
			2 Ea/pc	C2-11-2	Locating Pin	0	
			2 Ea/pc	c2-12-1	Lock Bushing	0	
			1 pcs/pc	C2-12-3	Lock	1	
			2 Ea/pc	C2-12-7	Teflon Spacer Lock	0	
			2 pcs/pc	C2-12-8	DUST SHEILD - C2 HOOK	1	
			1 /pc	C2-13-4	Keeper C2 Hook	0	
			1 Ea/pc	C2-13-5	Keeper Spring	0	
			1 pcs/pc	C2-2-1	Side Plate	1	
			2 pcs/pc	C2-3-1	Latch Shaft Du Bearing	0	
			1 pcs/pc	C2-3-10	Latch Shaft	1	
			1 pcs/pc	C2-3-11	Actuator	1	
			1 pcs/pc	C2-3-2	Latch Roller Pin	1	
			2 Ea/pc	C2-3-3-1	Roller Pin Retaining Ring	0	
			1 pcs/pc	C2-3-3	Latch Roller	1	
			1 pcs/pc	C2-3-3-1	Latch Roller DU Bearing	1	
			2 Ea/pc	C2-3-5	Spacer, Teflon	0	
			1 pcs/pc	C2-3-6	Latch	1	
			2 pcs/pc	C2-3-8	Actuator Shaft Bushing	1	
			2 Ea/pc	C2-4-1	Trunnion Bushing	0	
			1 pcs/pc	C2-4-4A	Load Beam Assembly - C2 Hook	2	
			1 Ea/pc	C2-5-1	Actuator Stop	0	
			1 /pc	C2-7-1	Load Beam Bumper	0	
			2 pcs/pc	C2-7-2	Lock Bumper	1	
			1 /pc	C2-9-1	Clock Spring Cover	0	
			1 Ea/pc	C2-9-2	Clock Spring	0	
			4 Ea/pc	C2-9-3	Clock Spring Cover Screw	0	
			1 pcs/pc	C3-10-2	Lock Spring	1	
			2 pcs/pc	C3-3-4	Link Pin	1	
			4 pcs/pc	C3-3-4-1	Ring, Retaining	0	
			1 pcs/pc	C3-3-7	Link	1	
			1 pcs/pc	C3-3-8	Actuator Spring	1	
			1 pcs/pc	C3-8-2	Solenoid	5	
			1 pcs/pc	C3-8-4	Solenoid Cover Gasket	1	

Part No	Description	Operation	Quantity	Component Part/Item	Component Name	Sub Components	Mfr Parts
			1 pcs/pc	C3-8-5	Solenoid Cover	1	
			1 Ea/pc	EL-PLUG-M	3-Prong Male Spade Plug	0	3
			1 ft/pc	M27500-16TG2T14	Wire - 16-Gauge - Shielded	0	3
			3 Ea/pc	MS21044N4	Nut, Self-Locking	0	3
			3 Ea/pc	MS21083N3	Nut	0	3
			1 Ea/pc	MS35266-63	Solenoid Cover Screw	0	3
			4 Ea/pc	MS35338-137	Washer	0	3
			4 Ea/pc	MS35338-137	Washer	0	3
		2	4 Ea/pc	NAS1149F0332P	Washer (AN960-10L)	0	3
			1 Ea/pc	NAS1149F0363P	Washer (AN960-10)	0	3
			1 Ea/pc	NAS1149F0416P	Washer (AN960-416)	0	3

0 1 C2-13-6P KEELER

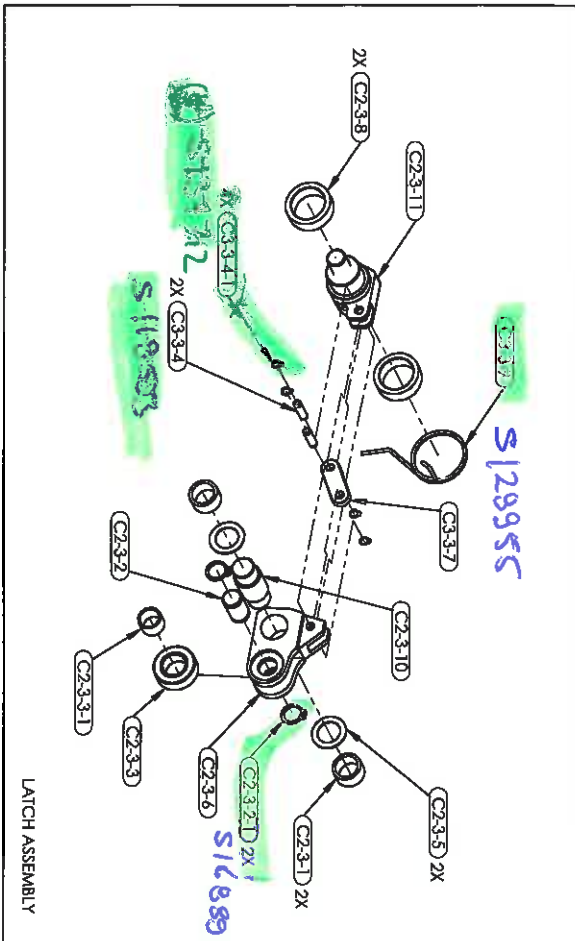
1 C3-8-3-1 SEL. SPACER

REVISIONS			
REV	ECR	DESCRIPTION	DATE
			INITIAL APPROVER

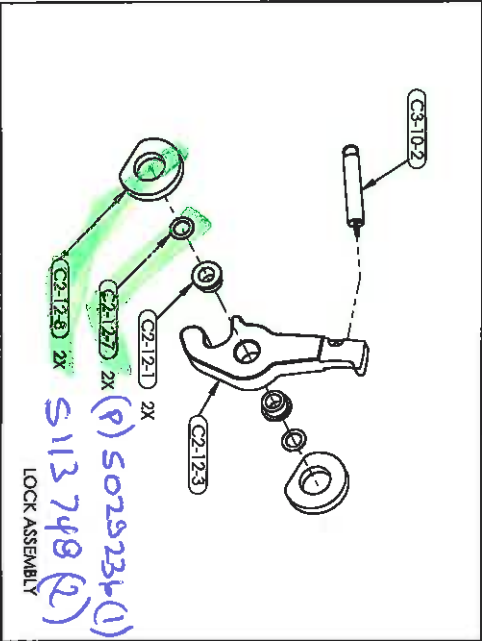


This drawing is controlled by the customer. It is the responsibility of the customer to ensure that the drawing is used for the intended purpose and that the customer is aware of any changes to the drawing.

REV	SCR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-054	ADDED BREAKING DETAIL.	8/26/2015	DWB	JAG

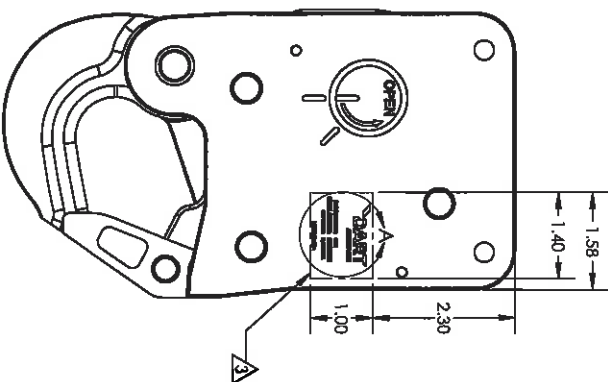


LATCH ASSEMBLY



LOCK ASSEMBLY

DETAIL A
SCALE 2:1



NOTE:
1. LASER ENGRAVE DART LOGO, P/N, S/N, CAPACITY, "MADE IN USA," WITHIN BOUNDARY.

TITLE		C2-K HOOK ASSY	
DATE		C2-K	
REV		2	
REVISIONS 1. LASER ENGRAVE DART LOGO, P/N, S/N, CAPACITY, "MADE IN USA," WITHIN BOUNDARY. 2. DART LOGO			
DRAWN BY		CANNAN	
CHECKED BY		CANNAN	
DATE		8/26/2015	
SCALE		1:2	
SHEET		3 OF 3	



Remote Cargo Hook Test Form

C2-k

MAKE SURE YOU ARE USING THE CORRECT TEST FORM FOR THE CORRECT SOLENOID!

NEW SOLENOID (152951-001)

Work Order:

200411

Customer:

Serial Number:

AC 12004

Date:

2019-9-17

# of Releases	Load (Lbs.)	Release Method	Remarks	Result	Pass/fail
1	5,000	Static Hold	Hold for two Minutes and reduce load to zero	N/A	Pass
10	1,000	Electircal, 25 volts	No "hang ups" permitted	N/A	Pass
2	2,000	Electircal, 22 volts	Current shall not exceed 13.0A	9.1 Amp.	Pass
2	1,500	Electircal, 22 volts	Current shall not exceed 13.0A	8.9 Amp.	Pass
2	1,000	Electircal, 22 volts	Current shall not exceed 13.0A	9.1 Amp.	Pass
2	500	Electircal, 22 volts	Current shall not exceed 13.0A	8.9 Amp.	Pass
2	100	Electircal, 22 volts	Current shall not exceed 13.0A	9.0 Amp.	Pass
1	2,000	Electircal, 20 volts	Current shall not exceed 13.0A	8.2 Amp.	Pass
1	2,000	Electircal, 28 volts	Current shall not exceed 13.0A	11.3 Amp.	Pass
1	2,000	Manual		N/A	Pass
1	2,000	Impact Test	Impact shackle 10 times, shall not release	N/A	Pass
1	N/A	Solenoid Ohms	Shall not exceed 2.1 - 2.4 Ohms	1.7 Ohms	Pass
1	N/A	Electircal Continuity	Across both wires	N/A	Pass

Test Conducted By:

Michel Lalonde

Signature

Sylvie Soucier



Remote Cargo Hook Test Form

C2-k

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2	1,500	Electircal, 22 volts	Current shall not exceed 13.0A	8.9 Amp.	Pass
2	1,000	Electircal, 22 volts	Current shall not exceed 13.0A	9.1 Amp.	Pass
2	500	Electircal, 22 volts	Current shall not exceed 13.0A	8.9 Amp.	Pass
2	100	Electircal, 22 volts	Current shall not exceed 13.0A	9.0 Amp.	Pass
1	2,000	Electircal, 20 volts	Current shall not exceed 13.0A	8.2 Amp.	Pass
1	2,000	Electircal, 28 volts	Current shall not exceed 13.0A	11.3 Amp.	Pass
1	2,000	Manual		N/A	Pass
1	2,000	Impact Test	Impact shackle 10 times, shall not release	N/A	Pass
1	N/A	Solenoid Ohms	Shall not exceed 2.1 - 2.4 Ohms	1.7 Ohms	Pass
1	N/A	Electircal Continuity	Across both wires	N/A	Pass

Test Conducted By:

Michel Lalande

Signature

Sylvie Poucher